REMARKS/ARGUMENTS

Claim 9 is amended. Claim 14 is canceled without prejudice. The support for the amendments can be found on page 10, lines 1-31, and in the allowed claim 1. Applicant believes the foregoing amendments of claim 9 comply with requirements of form and thus may be admitted under 37 C.F.R. § 1.116(a). Alternatively, if these amendments are deemed to touch the merits, admission is requested under 37 C.F.R. § 1.116(b). In this connection, these amendments were not earlier presented because they are in response to the matters pointed out for the first time in the Final Office Action. Lastly, admission is requested under 37 C.F.R. § 1.116(a) as presenting rejected claims in better form for consideration on appeal.

Claims 1-6, 9, 10, and 12-13 are pending in the application. Reexamination and reconsideration of the application, as amended, are respectfully requested.

It is noted with appreciation that claims 1-6 are allowed.

Claims 9-10, 12, and 13 are rejected under 35 U.S.C. § 102(b) as being anticipated by McCulloch et al. (EP 351 988 A2). This rejection is respectfully traversed.

Claim 9 has been amended to clarify that the gripper mechanism of the present invention has a pair of oppositely disposed gripping jaws moving synchronically **toward or away** from each other. Additionally, amendments to claim 9 clarify that each gripping jaw has an inner side with at least one **conical pin, which extends toward the opposite gripping jaw**, wherein each conical pin is complementary to at least one hole with tapered conical opening and wherein a movement of gripping jaws toward each other causes the pins to engage the holes. Finally, amended claim 9 explicitly require that an engagement of said complementary tapered holes by the pins located on the inner sides of said gripping jaws **securely retains the reagent pack without assistance of additional mechanical structures** during its transport.

Although applicants believe that claim 9 in its original form was clear with respect to the above-described features, **applicants amended claim 9 in order to make these features more explicit** and to advance the instant application to allowance. All amendments are supported by the disclosure on page 10, lines 1-31, of the instant specification.

McCulloch does not anticipate the amended claim 9 because he has no teaching whatsoever of a gripper mechanism with gripping jaws, which move toward or away from each other, much less of a gripper mechanism of the present invention, in which gripping jaws have pins for engagement with complementary tapered holes on the outer sides of the reagent pack. Instead, McCulloch describes a microtitre plate carrier transfer mechanism comprising a fork 20 having non-movable formations for engagement with the grooves of plate carriers (column 4, lines 50-55). Unlike the gripping jaws of the present invention, which grip the reagent pack by moving the gripping jaws toward each other, the fork of McCulloch simply slides under a plate carrier in order to retrieve it from or place it into various operational stations of the apparatus (column 3, lines 23-27). In fact the Examiner herself observed that, in McCulloch, gripper engages reagent pack "by slipping each jaw within indentation, such that the projecting portions of the reagent packs rests upon the jaws" (§2 of the outstanding Office Action). Such "slipping" and "resting" action is different from the "gripping" required by the present invention.

Claim 9 is not obvious in view of McCulloch. As explained on page 10 (lines 8-21 and lines 29-31) and page 12, lines 3-15, of the present invention, the engagement of the tapered holes of a reagent pack by the pins of the gripping jaws provides a number of advantages. Some of the advantages include an increase in the tolerance of the gripper to a misalignment of a reagent pack, an improvement of the precision in the orientation of the reagent pack during transportation, and a simplification of the retrieval of the reagent pack. For example, because in the present invention a reagent pack is picked as a result of the compression of the gripping jaws against it sides, the compression of the gripping jaws forces a

misaligned reagent pack into a proper position (page 10, lines 16-21). Additionally, the use of the pins of the gripping jaws allows positive retention of the reagent packs by the gripper even in the event that there is a loss in the power to the system resulting in a loss of compression force of the gripping jaws (page 10, lines 22-28).

Nothing in McCulloch teaches or suggests gripping jaws with pins engaging tapered holes located on the sides of a reaction pack. Instead, as discussed above, McCulloch, describes a transfer mechanism with a fork that slides under a plate carrier. The retrieved plate carrier is firmly secured on the top of the fork by an engagement between grooves on the bottom of the plate carrier and the complementary formations on the fork (column 4, lines 50-55). Such a construction cannot tolerate any misalignment of the plate relative to the fork.

Also, non-movable formations of the McCulloch's fork cannot move toward or away each other as required by claim 9. To the contrary, the relative lateral position of the non-movable formations is determined precisely by the distance between grooves of the plate carriers and cannot be changed at all. Therefore, the gripping jaws of the present invention are structurally different from the fork of McCulloch.

Since the gripping jaws of the present invention are structurally different from the fork of McCulloch and provide a number of advantages, such as an increase in the tolerance of the gripper to a misalignment of a reagent pack, nothing in McCulloch would have motivated one skilled in the art to arrive at the gripping jaws of the instant claim 9. Therefore, claim 9 is neither anticipated nor rendered obvious by McCulloch. Claims 10 and 12 depend from patentable claim 9 and are, therefore, patentable for at least the same reasons as claim 9.

Claims 9-10, 12, and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over McCulloch in view of the U.S. Patent No.6,159,425 (the '425

patent), or the U.S. Patent No.4,812,392 (the '392 patent), or the U.S. Patent No.5,417,922 (the '922 patent). This rejection is respectfully traversed.

As discussed above, claim 9 is neither anticipated nor rendered obvious by McCulloch. The '425, '392, and '922 patents cannot remedy the defect of McCulloch, because none of the cited patents teach or suggest gripping jaws with **pins on their inner sides, which are complementary to tapered holes** located on the outer sides of reagent pack, much less gripping jaws with such pins that **securely retain** reagent packs during their transport **without assistance of additional mechanical structures**.

The '425 patent teaches two releasable clamp mechanisms, each pushing microplate against a frame structure of a transporter 200 (column 6, lines 43-54). The '425 patent relies on "shelve structure and associated frame structure for supporting a microplate" (column 4, lines 50-56; column 5, lines 43-54). Thus, clamp mechanisms themselves cannot be used to secure a microplate without assistance of the holder 200 and thus, they are different from the gripping jaws with the pins of the present invention. Also, nothing in the '425 patent teaches microplates having tapered holes located on their outer sides and gripping jaws with **pins on their inner sides, which are complementary to** the tapered holes.

Similarly, the '392 patent teaches using a tray support 14 supporting a tray from the bottom while it is laterally fixed by holder arms (column 3, lines 52-59). Based on this teaching, those skilled in the art would have been reluctant to use only holder arms for transporting a tray as required by the instant claim 9. Additionally, nothing in the '392 patent teaches trays having tapered holes located on their outer sides and gripping jaws with **pins on their inner sides, which are complementary to** the tapered holes.

Although the '922 patent describes robot arm 78 with the jaws 76 for picking up a specimen carrier 10, it does not describe specimen carrier having tapered holes located on their outer sides and gripping jaws with **pins on their inner sides, which are complementary to** the tapered holes. Accordingly, in the event that there is a

loss in the power to the system resulting in a loss of compression force of the gripping jaws 76, the jaws of the robot arm 78 would have been released and a specimen 10 would have been dropped. In the present invention, on the other hand, because of the use of the pins and tapered holes, such loss of the power would not have resulted in the loss of the reagent pack (page 10, lines 22-28).

Furthermore, even if McCulloch and the '425, '392, or '922 patents indeed had teachings of certain limitations of claim 9, it still **would not have been obvious to combine** McCulloch with the '425, '392, or '922 patent. Such a combination is not possible without significant modifications to the device of McCulloch.

McCulloch describes a plate carrier mechanism utilizing a fork having precisely positioned formations, which engage with complementary grooves on plate carriers (column 4, lines 50-55). Because the distance between the formations on the fork is determined by the distance between groves on the bottom portion of the plate carrier, the formations must remain fixed in their positions in order for the fork to "slip under" and engage with the plate carrier. On the other hand, the gripping mechanisms of the '425, '392, and '922 patents require a movement of two jaws ('922) or holder arms ('392) or clamp mechanisms ('425) toward each other in order to hold an object. In order to combine McCulloch and the '425, '392, or '922 patent, as suggested by the Examiner, one would have to redesign the apparatus of McCulloch, including the structure of the carriers and the fork, to accommodate the gripping movement. Such modification is not possible without destroying the function of the apparatus disclosed in McCulloch. It is respectfully submitted, therefore, that it would not be obvious to combine McCulloch and the '425, '392, or '922 patent to arrive at the present invention.

Additionally, there is no suggestion in the cited references of modifying the apparatuses disclosed therein in the direction of the present invention, nor is there any suggestion whatsoever of the desirability of such a modification. The mere fact that a reference may be modified in the direction of the claimed invention does not

make the modification obvious unless the reference expressly or impliedly teaches or suggests the desirability of the modification. Thus, it is respectfully submitted that the ordinarily skilled artisan, working without the benefit of the applicant's specification, would have had no motivation to combine the features of the cited references to arrive at the present claim 9. Therefore, claim 9 is neither anticipated nor rendered obvious by McCulloch and the '425, '392, or '922 patent. Claims 10, 12, and 13 depend, directly or indirectly, from patentable claim 9 and are, therefore, believed to be patentable for at least the same reasons as claim 9.

Claims 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over McCulloch in view of the '425, '392, or '922 patent. This rejection is respectfully traversed.

As discussed above, claim 9 is neither anticipated nor rendered obvious by McCulloch and the '425, '392, or '922 patent. Claims 13 and 14 depend from patentable claim 9 and are, therefore, patentable for at least the same reasons as claim 9.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 337-6700 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
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Dated: February ____, 2004

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